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ABSTRACT

The Committee on Junior (Community) College Curriculum was formed to suggest means of cooperation and communication between faculties of 2-year colleges and those of institutions to which their students commonly transfer. It was also charged with encouraging new approaches of instruction in accounting and other related subjects, as well as considering employment for graduates of 2-year colleges. Topics covered by the 8-member committee were the role of the community college in higher education, accounting in the community college, and articulation problems concerning community and senior colleges. Committee findings included: (1) there are sufficient employment opportunities for graduates of 2-year accounting curricula to justify such programs; (2) no specific accounting curriculum was recommended since flexibility in meeting local needs should be maintained; (3) cooperation between 2- and 4-year schools should include counseling transfer students to take only one year of accounting; (4) there needs to be continuous communication between 2- and 4-year schools so that their programs and objectives are mutually understood; and (5) the American Accounting Association, the American Institute of Certified Public Accountants, and the American Association of Collegiate Schools of Business need to work to bring together teachers from both types of schools. A bibliography is included to encourage and facilitate further research. (RN)

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# REPORT
# of the Committee on Junior (Community) College Curriculum
# 1971-1972

Submitted to:

THE AMERICAN ACCOUNTING ASSOCIATION

July 10, 1972

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UNIVERSITY OF CALIF.
LOS ANGELES
AUG 16 1972
CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

COMMITTEE ON JUNIOR (COMMUNITY) COLLEGE CURRICULUM

| | | |
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Charge: To suggest means of sustained cooperation and communication between faculties of two-year (i.e., junior or community) colleges and faculties of other schools to which their students commonly transfer, and to encourage sensitivity to new approaches to accounting instruction and instruction in other related subjects. Attention should also be paid to employment for graduates of two-year colleges.

The views expressed in this report are those of a majority of the committee members. Publication in this volume does not imply agreement or official endorsement on the part of the American Accounting Association or its Executive Committee.

# REPORT OF THE COMMITTEE
# ON THE
# JUNIOR (COMMUNITY) COLLEGE CURRICULUM

## INTRODUCTION

Students generally do not decide to major in accounting until their freshman or sophomore year in college. The number of students who transfer from community colleges to complete the baccalaureate degree with a major in accounting is steadily increasing. Two year colleges are growing so rapidly that some day they may provide most of the introductory accounting education.

These statements lead to the inescapable conclusion that there is need for close cooperation between community colleges and the schools to which their students commonly transfer.

The 1971-1972 Committee on the Junior (Community) College Curriculum was charged to find ways to bring the two types of schools together so that each might better understand and solve the problems which arise when students transfer from the community colleges to the four year schools.

As the first step in bringing the two groups together the committee contacted the chairmen of all the AAA regional committees and urged them to plan programs that would attract teachers from the community and junior colleges. While this action was taken by previous junior college committees, this year's response, especially in the northeast region, was most gratifying. The committee strongly recommends that

special efforts be made every year to encourage community college teachers to attend the regional meetings. It is also important to draw community college teachers to the annual AAA meeting, but limited travel budgets at most two year schools make it much easier to attend a regional meeting.

As the committee continued its work during the year, it found that in some parts of the country there was close and friendly cooperation, where students from the two-year schools had little or no trouble in transferring to a four year school. (Admittedly, this exists primarily where students transfer elementary accounting only). In other areas, unfortunately, the committee found community college teachers are upset, up in arms, and rather militant in their dissatisfaction with the four year schools.

Some of these teachers are quite vocal. They lash out at the four year schools as being unfair in not granting transfer credit for certain accounting courses. They object to their students having to take tests to validate transfer credit and they criticize the American Association of Collegiate Schools of Business (AACSB) for setting standards that discourage offering more than a limited number of business courses in the first two years of college.

Community college instructors seem to be increasingly critical of what they consider to be arbitrary and capricious policies in granting transfer credit for community college courses. These policies sometimes result in severe hardships to students. In California, for example, a community college student may prepare to transfer to

a specific state college or university but when he is ready to transfer he may be denied admission because of capacity enrollment. When he then applies to another college or university within the state, he finds the entrance requirements are different. He must then take additional courses which may add from one to three quarters of extra work.

Community college instructors often look upon these diverse policies in granting transfer credit as an affront to their abilities and professional status. They feel that courses offered by them are just as intellectually demanding and are taught just as well as (if not better than) similar courses taught in four year institutions. In other words, they feel that they are being looked down upon by instructors in four year schools.

Some community college instructors also feel they are treated in an inferior manner by employers, especially those in public accounting. They want opportunities to participate in faculty internships and professional development courses and to receive literature and other benefits available to instructors in four year schools.

On the other side of the fence, some faculty members of four year schools are less than enthusiastic about transfer students. These reservations are not always aired, but there is the feeling that courses taken in the community college are not as rigorous as those offered in the upper division of four-year schools, and that instructors of intermediate and other advanced courses may not have the background, experience, or education comparable to that found in four year institutions.

These charges and countercharges, myths and half truths, need to be resolved in a friendly and professional way. Many of these misunderstandings are much like those in international relationships; both sides need to communicate with each other. As noted by the 1970 AAA committee: "The welfare of the students suffer from provincialism and isolation on the part of either group".[1]

## THE ROLE OF THE COMMUNITY COLLEGE IN HIGHER EDUCATION

An examination of the role of two year colleges may help to shed some light on articulation problems that arise when students transfer to four year schools.

There are two types of two year schools: publicly supported community colleges and privately supported independent colleges. Included in the first category are technical institutes as well as branches of universities. The private colleges include many institutions that are affiliated with religious denominations.

Historically, junior colleges were founded to prepare for the first two years of college education. There has been a gradual change of name from "junior college" to the more comprehensive "community college" so as to reflect the broader goals of most two year schools.

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[1] "Report of the Committee on the Accounting Curriculum for Junior and Community Colleges." The Accounting Review, supplement to Vol. XLV, 1970, p. 18.

A report of the Carnegie Commission on Higher Education called "Policies for the Community Colleges" concluded that "every American citizen over 18 should have unlimited, easy, and lifelong access to learning programs beyond the high school level."[2]

This goal of "providing postsecondary education for all" can only be met by flexible admissions policies so that the many as well as the few have an opportunity for education beyond the high school. Today's community college, contrary to the junior colleges of more than a generation ago, offers a wide variety of programs at low cost, in the evening as well as the day, including:

1. The first two years of a four year program.
2. Occupational education to train for jobs at the end of two years or less.
3. General education programs for all members of the community.
4. Retraining and upgrading for adults already employed.
5. Guidance and counseling services to assist youths and adults to adjust to a constantly changing society.
6. Services which contribute to the cultural and economic welfare of the community.

There is considerable evidence that the community college is emerging as a center for continuing education, designed to meet the interests of the adult community throughout their lives. This is the justification for offering advanced accounting courses (e.g., as auditing, advanced accounting, and taxation) in the evening session. Community colleges may also become a center for shorter professional development courses in accounting.

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[2]Carnegie Commission on Higher Education, "Policies for the Community Colleges", New York, N.Y., 1970, p. 15.

What are the reasons for comprehensive community colleges?

The answers include:

1. Not all students have verbal skills or intellectual interest. The community college can provide training commensurate with the students' capabilities.

2. The community college provides students from low income families the greatest opportunity for postsecondary education.

3. The community college places considerable emphasis on student counseling and guidance. This helps the student to know himself better, choose realistic goals, and effectively grapple with problems.

4. The community college provides an opportunity to make up deficiencies either in subjects or grades.

5. Many semi-professional and skilled jobs require only one or two years of postsecondary school preparation. Thus vocational training and specialization is possible for young people who do not desire or may not be capable of four or more years of college.

6. The community college can provide two years of lower division transfer education. This may be a matter of finances, proximity, or personal preference, or combinations of the three.

7. The community college emphasizes good teaching rather than "publish or perish". The student is less likely to be exposed to large classes, television lectures, or teaching assistants.

The two year schools feel their primary mission is to serve their community by preparing students to become useful, responsible and productive members of society. In justifying a two year program in accounting, the faculty members emphasize that they have a responsibility to teach accounting technicians, men and women who can find jobs as bookkeepers, accounting assistants, and in related fields such as data processing. They resist efforts to limit students

to general education; they must equip students to gain meaningful employment on leaving the community college.

The rapid growth of two year colleges is evident from the following enrollment figures and estimates prepared by the Office of Education:[3]

| | |
|---|---|
| 1960 | 451,000 |
| 1965 | 841,000 |
| 1970 | 1,630,000 |
| 1975 (est.) | 2,415,000 |
| 1980 (est.) | 3,001,000 |

Admissions to the two year colleges as a share of freshman admissions to all colleges is:[4]

| | |
|---|---|
| 1960 | 23% |
| 1972 | 38 |
| 1980 (est.) | 42 |

The following data has been taken from unpublished tables of the National Center for Educational Statistics:[5]

| | Fall 1970 | Estimated 1980 |
|---|---|---|
| Enrollment - 2 year schools | 1,629,982 | 3,001,000 |
| All institutions | 8,580,887 | 13,277,000 |
| | **Estimated 1970-71** | **1980-81** |
| Earned degrees: | | |
| Business and commerce | 116,480 | 164,400 |

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[3] "Why It's Easier to Get into College Now." U.S. News and World Report, March 6, 1972, p. 24.

[4] Ibid, p. 25.

[5] "Higher Education, 1980: New Federal Projections," The Chronicle of Higher Education, 6:28; April 17, 1972, p. 1.

The 1971 Standard Education Almanac lists (for the fall of 1969) 886 two year institutions with an average enrollment of approximately 2,500. Of the total, 67 have enrollments between 5,000 and 9,999, while 35 have enrollments over 10,000. The states with the largest number of two year schools (public and private) are:

| | |
|---|---|
| California | 94 |
| New York | 63 |
| Texas | 51 |
| North Carolina | 50 |
| Illinois | 46 |
| Massachusetts | 39 |
| Michigan | 37 |
| Mississippi | 35 |
| Florida | 32 |

Care needs to be taken so that the "open door" policy of the comprehensive community college does not become a "revolving door". A study by Dr. Alexander W. Astin found that almost a third of the students entering the two year colleges do not return for a second year, while 61.6% of the entering students do not complete a two year program.

> "When one considers that nearly 90 percent of all two-year college students expected to obtain at least the associate's degree when they entered college, but that 60 percent left their first college without having a degree, and that fewer than half of these even requested that their transcripts be forwarded to a second institution, it may certainly be said that unfilled expectations are the rule rather than the exception among two-year students."[6]

While Astin concedes that there are a number of explanations for this situation, nevertheless he draws the conclusion that the higher dropouts are likely to be a function of the kind of students admitted.

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[6]Astin, Alexander W., College Dropouts: A National Profile, Washington, American Council on Education, 1972, p. 2.

The picture at the four year schools is somewhat better, but still nothing to be smug about. In the four year schools nearly 95 percent aspired to at least a baccalaureate degree when they entered, but more than 40 percent had left their first institution without the degree four years later. Of those who dropped out of their first institution, only about half ever had transcripts sent to a second college.

All the 122,400 junior college instructors in the United States are in need of in-service training, according to a report of the National Advisory Council on Educational Development appointed by President Richard M. Nixon and released to the Associated Press on May 28, 1972.

While the 215 page report, written under the leadership of Marvy W. Rieke of the Oregon House of Representatives, was not available at the time of this writing, the following press quotations are of interest:

> "While community-junior colleges have loudly claimed to be teaching institutions, they might be sadly quiet if they ever examined their true product on student learning.
>
> There is little evidence to suggest that these programs (at the 100 graduate institutions which offer training for junior college teachers) are adequate for the task.
>
> A properly trained junior college teacher should first have a commitment to the philosophy of the community college: open door, community service, teacher oriented, student centered and a comprehensive curriculum.
>
> A second requisite is that the teacher have an understanding of the diversity of students in age, ability, socioeconomic and ethnic background and personality characteristics.
>
> Too few colleges provide a well-designed, strongly supported, total institution in-service program."[7]

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[7] "Study Assails Preparation of Junior College Teachers," Akron Beacon Journal, May 28, 1972, p. 27.

This committee is in no position at this time to judge whether these comments, directed at all community college teachers, apply with equal vigor to accounting instructors. Nevertheless, the need for professional development of all accounting teachers, in the four-year schools as well as the community colleges, cannot be denied. This committee has made recommendations on this subject in the concluding section of this report.

## ACCOUNTING IN THE COMMUNITY COLLEGES

Approximately 36% of the elementary accounting teachers in higher education are in the community colleges. According to the South-Western Publishing Company:

> "Our college catalog survey which was updated recently includes 1,060 junior and community colleges. 922 or 93.6 percent offer elementary accounting. Our survey also indicates that 2,728 faculty members are teaching elementary accounting. Our college catalog survey also includes 1,788 senior colleges. 1,202 or 67.2 percent of the senior colleges offer elementary accounting. 4,768 faculty members are indicated as teaching elementary accounting."[8]

Accounting departments, per se, do not exist in all community colleges. "Accounting courses are often offered by social science divisions, applied technology divisions or various other divisions or departments."[9]

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[8]Letter from Mr. Eugene F. Egnew, Assistant Manager, College Department, dated September 1, 1971.

[9]Anita I. Tyra, "Accounting Education at the Community College," Journal of Contemporary Business, Winter, 1972, p. 27.

Accounting instruction in community colleges is designed to meet the needs of students with a variety of goals:

1. Those who plan to transfer to a senior institution (either to major in accounting or who take accounting as a foundation for some other program).

2. Those who desire a two-year "career" program in accounting as preparation for early employment.

3. Those who need accounting as a tool course for some other two-year program such as secretarial science or merchandising.

4. Those who are interested in accounting as a part of general education. (Although this point of view is new, the recent Price Waterhouse Foundation report should stimulate interest in this objective).[10]

A major problem in designing community college curricula is that students do not always know their career goals when they enter college. Programs have to be designed to minimize the additional courses that may be required when students change their minds.

Most four-year schools begin the teaching of accounting in the sophomore year (or later) on the premise that a year of college education will prepare students better for the concepts and theory required in the elementary course. On the other hand, most community colleges offer accounting in the freshman year. The "open door" policy and the need to provide more vocational type education for a large number of students who will not go beyond two years are

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[10] Gerhard G. Mueller (ed.), A New Introduction to Accounting, (A Report of the Study Group Sponsored by The Price Waterhouse Foundation). Seattle, Washington: Price Waterhouse Foundation, 1971.

some of the explanations why community colleges offer accounting in the freshman year. It is also evident that if a community college has a two-year program in accounting it must offer accounting principles in the first year.

Problems often arise when a student who takes the two-year "career" program later decides to continue for the baccalaureate degree. A later section of this report examines this problem.

Two-Year "Career" Programs

Two-year "career" programs in accounting have developed in response to needs suggested by community surveys, recommendations of employer advisory committees, and the like. (The term "career" has replaced "terminal" because the latter phrase fails to recognize the need for continuing education).

Unpublished dissertations by Ozzello,[11] Kelly,[12] and Yandoh[13] have shown that some positions in accounting can be performed adequately by graduates of two-year colleges. These

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[11]Lawrence M. Ozzello, "An Analysis of Accounting-Type Activities Performed by Technical Accountants in Firms Manufacturing Durable Goods With Implications for the Evaluation of Post-Secondary Terminal Accounting Programs", (unpublished Doctor's dissertation, Michigan State University, 1967), p. 5.

[12]Richard L. Kelly, "A Job Analysis of Tasks of Selected Semi-Professional Accountants in New York State", (unpublished Doctor's dissertation, The Pennsylvania State University, 1970), p. 155.

[13]Keith T. Yandoh, "The Upstate New York Community College Career Accounting Graduate", (unpublished Doctor's dissertation, State University of New York at Albany, 1971), p. 62.

positions require more knowledge than that of the typical bookkeeper but less than that of a professional accountant. Persons who fill these positions are typically known as semi-professional accountants or para-professional accountants.

In 1971 the United States Department of Labor commented:

> "...junior college, business school or correspondence course training is acceptable for some accounting jobs..."[14]

The 1971 edition of Occupational Manpower and Training Needs projects an increase of 43.4 percent in the total number of accountants from 1968 to 1980 (from 500,000 to 720,000). Annual openings in accounting positions, considering growth and replacements, should average 33,000.[15]

Many of the people who fill these openings will come from accounting graduates of colleges and universities. In 1968-69, four-year schools produced 21,405 graduates holding a bachelor's or graduate degree in accounting. In the same year, 4,741 junior college graduates in accounting entered the job market.[16] The total of 26,146 graduates (in 1968-69) could not fill the annual demand for accountants at that time.

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[14] United States Department of Labor, Bureau of Labor Statistics, Occupational Manpower and Training Needs, 1971 edition. Washington, D.C.: U.S. Government Printing Office, p. 22.

[15] Ibid.

[16] Ibid.

While the supply of accountants has increased since 1968-69, the demand for accountants apparently has also continued to increase. Included in this demand are graduates of two-year schools for positions in industry, non-profit organizations, public accounting, government, and educational institutions (see Table 1 on Page 16). Some of the factors leading to the use of graduates of two-year schools are:

1. the substantial beginning salary needed to attract graduates of four-year schools,

2. the dissatisfaction with the job when routine tasks present little or no challenge to holders of bachelor's or graduate degrees,

3. the possible shortage of the number of four-year graduates available in some areas and to certain types of employers, and

4. the favorable experience in staff retention when using graduates of two-year schools.

Certainly other factors are considered, but the Committee considers the items listed to be of paramount importance.

This committee was interested in determining the employment experience of graduates of community college accounting programs for the past two years. A questionnaire containing employment questions (among others) was mailed to 682 two-year colleges listed by the South-Western Publishing Company as teaching business administration subjects. Returns were received from 292 schools, or 42.8 percent of those from whom information was requested.

For purposes of uniformity in interpreting responses, the committee defined a community college accounting major as one who takes 12 or more semester hours (18 or more quarter hours) of accounting. Replies from 292 schools indicated 145 (49.7%) offer a major in accounting, 129 (44.2%) schools do not offer a major in accounting, and 18 (6.1%) respondents did not answer the question.

Respondents from 48 of the 145 schools indicated no graduates at the end of the 1970 or 1971 academic year. The 97 schools reporting graduates listed a total of 4,150 students who majored in accounting during the past two years.

Positions Held by Graduates Accepting Employment. When asked to report on the type of employment accepted after graduation, many schools indicated no data was available and, in addition, a large number of the "graduates" continued their education at a four-year institution.[17] Only 70 schools furnished data concerning their employed graduates (see Table 1 on page 16).

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[17] The same problem was encountered by the American Institute of Certified Public Accountants Committee on Relations with Community Colleges. In their Spring, 1971 report (after a survey was made in eight states of 117 schools), the Committee concluded "Many colleges do not keep records of their career accounting graduates. Respondents indicate that most career graduates enter industrial and private accounting jobs. Public accounting is the next most popular selection. Some graduates go into government jobs, a few enter teaching." (Quoted from page 4 of the report).

TABLE 1

Number Employed & Salary Information by Type of Employment

| Type of Employment | Number Employed | Average Starting Salary | Median Starting Salary | Starting Salary Range |
|---|---|---|---|---|
| Industrial Firms | 849 | $532 | $520 | $400-833 |
| Non-profit Firms | 51 | 541 | 575 | 400-625 |
| Public Accounting | 116 | 529 | 520 | 380-666 |
| Government | 178 | 568 | 583 | 400-800 |
| Educational Institutions | 42 | 480 | 500 | 340-525 |
| Unclassified | 7 | ---- | ---- | ------- |
| Total | 1,243 | | | |

It is apparent that the majority of the graduates went into industry, while the remainder were scattered among government agencies, public accounting, non-profit institutions and/or educational institutions. Table 2 provides the breakdown.

TABLE 2

Number & Percentage of Employees by Type of Employment

| Type of Employment | Number Employed | Percentage of Total Employed |
|---|---|---|
| Industrial Firms | 849 | 68.7 |
| Governmental Agencies | 178 | 14.4 |
| Public Accounting | 116 | 9.4 |
| Non-Profit Institutions | 51 | 4.1 |
| Educational Institutions | 42 | 3.4 |
| Total | 1,236 | 100.0 |

Keith Yandoh reported on the activities of 207 career accounting graduates since graduation from thirteen community colleges in upstate New York. He found a high number (47.3%) of two-year students later enrolled in a four-year college. (See Table 3).

This finding tends to confirm the Committee's hypothesis that students from the two-year accounting programs are more likely to continue their progress toward a baccalaureate degree than those from some other "career" programs. According to Yandoh, the types of full-time accounting positions held by graduates of the two-year accounting program are listed as follows:[18]

Account Clerk (6)
Accountant (3)
Accounting Analyst
Accounting Clerk (6)
Accounting Manager
Accounting Specialist
Accounts Receivable Clerk
Administrator
Assistant Bookkeeper
Assistant Manager of Accounts Payable
Assistant to Head Bookkeeper
Assistant Office Manager
Associate Manager
Auditor
Bookkeeper (9)
Chief Accountant
Clerk
Corporate Accountant
Cost Accountant (2)
Credits and Collections Clerk
Desk Clerk
Junior Accountant (5)
Management Trainee
Mortgage Clerk
Night Auditor
Office Manager--Accountant
Pay Disbursing Specialist
Payroll Clerk (2)
Personnel Accounting Clerk
Public Accountant
Remittance Adjuster
Secretary
Senior Accountant
Senior Accounting Clerk
Staff Accountant (2)
Tax Consultant
Tax Examiner
Teller
Accounts Examiner
Wage Data Reporting Clerk

Numbers in parentheses indicate the number of accounting graduates who had held an accounting position with that title. Titles for positions held by one graduate are indicated by listing the position title only.

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[18] Yandoh, op. cit, p. 62.

TABLE 3

ACTIVITIES OF CAREER ACCOUNTING GRADUATES
SINCE GRADUATION
(Arranged in Frequency of Response Order)

N=207

| | Number | Per Cent |
|---|---|---|
| Enrolled in four-year college | 98 | 47.3 |
| Full-Time | (90) | (43.4) |
| Part-Time | ( 8) | ( 3.8) |
| Employed in accounting-related position | 81 | 39.1 |
| Full-Time | (67) | (32.3) |
| Part-Time | (14) | ( 6.7) |
| Employed in non-accounting position | 61 | 29.5 |
| Full-Time | ( 38) | (18.3) |
| Part-Time | ( 23) | ( 11.1) |
| Would like to find accounting-related position | 34 | 16.4 |
| Entered armed forces | 29 | 14.0 |
| Unable to find accounting-related position | 21 | 10.1 |
| Unemployed | 20 | 9.6 |
| Used accounting background during military service | 5 | .024 |
| Did not secure accounting-related position | 4 | .019 |
| Other | 1 | .004 |

Source: Yandoh, op. cit., p. 89.

Yandoh's findings included the following statements:

> "The number of graduates of career accounting programs who had transferred to full-time, four-year college programs exceeded the number of graduates who had secured full-time, accounting-related positions.
>
> "Approximately one-third of the graduates of career accounting programs had actually secured an accounting-related position at some time since graduation.
>
> "The career accounting program was dual-purpose rather than single-purpose; that is, the program was both occupationally oriented and transfer oriented."[19]
>
> "The duties of accounting-employed graduates included a variety of clerical tasks."[20]

Many employment opportunities for accounting graduates of community colleges are now available and this committee believes that demand for these graduates will continue to grow. While industrial firms have made the most extensive use of these graduates to date, it appears that other types of employees will use an increasing percentage of two-year accounting graduates in the future.

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[19] Ibid, p. 65.

[20] Ibid, p. 83.

Courses Required in the Two-Year Program

Yandoh describes the typical career accounting program as a

"two-year program with a balance between professional and general education courses. The general education phase of most programs encompasses about one-half of the total program and includes course work in mathematics and science. The course work in mathematics or science rarely exceeds six hours; some form of mathematics for business is usually accepted toward the mathematics requirement...

"The required number of academic credit hours in accounting in such programs ranged from twelve to twenty-three, with an average of approximately fifteen hours. The following accounting courses are typically required:[21]

| Course Title | Academic Credit Hours |
|---|---|
| Introductory Accounting | 6 |
| Intermediate Accounting | 3-6 |
| Cost Accounting | 3 |
| Tax Accounting | 3 |

The AAA Committee's questionnaire study in 1972 of 145 community colleges having an accounting major confirms Yandoh's findings:

TABLE 4

Required Courses in Accounting Major of 2-Year Colleges

| Course Title | Number of Schools Requiring |
|---|---|
| Principles | 145 |
| Intermediate | 130 |
| Cost | 107 |
| Taxation | 87 |
| Auditing | 26 |
| Advanced | 15 |
| Managerial | 17 |
| Other Courses | 10 |

[21] Ibid, p. 9.

The average number of semester hours required for a major was 17, with a range of 12 to 60 semester hours and a median of 16 semester hours. There were 14 community colleges that required 24 or more semester hours for a major in accounting.

Characteristics of the Two-Year College Faculty

Faculty education and background is an important factor in evaluating the quality of an educational program. The questionnaire circulated by the AAA Committee in 1972 (241 schools answering the question) revealed that 3.91 percent of the full time teachers had the doctorate while 82.41 percent had a master's degree. 17.77 percent of all full time accounting faculty held a C.P.A. certificate.

From the large number of part-time teachers (420 out of 1159), it may be inferred that many programs are being offered in the evening to adult students or that practicing accountants are used to teach one or two courses to students (due to budget problems, lack of qualified full-time teachers, and the like). The percentage of CPA's is higher among the part-time teachers (37.38%), but the committee found only 1.19 percent of the part-time teachers had the doctorate and 58.57 percent had a master's degree. Table 5 lists this information in detail.

According to an unpublished 1971 study by the AICPA Committee on Relations with Two-Year Colleges, over half the community college teachers have had experience in public accounting, industry, or government. Many of the remainder formerly taught business subjects in high schools. The typical teaching load, according to the AICPA, is 15 hours compared with the nine or twelve hours taught in the four-year schools.

TABLE 5

Degrees Held by Community College Teachers (241 schools)

| | Full Time | | Part Time | |
|---|---|---|---|---|
| | Number | % | Number | % |
| 1. Ph.D. or D.B.A. with C.P.A. | 3 | .40 | 0 | -- |
| 2. Ph.D. or D.B.A. only | 12 | 1.62 | 1 | .24 |
| 3. Ed.D. and C.P.A. | 0 | -- | 1 | .24 |
| 4. Ed.D. only | 14 | 1.89 | 3 | .71 |
| 5. M.B.A. or M.A. in business or economics with C.P.A. | 96 | 12.99 | 75 | 17.86 |
| 6. M.B.A. or M.A. in business or economics only | 376 | 50.88 | 136 | 32.38 |
| 7. Master's in other areas | 137 | 18.54 | 35 | 8.33 |
| 8. B.A. or B.S. with C.P.A. | 21 | 2.84 | 68 | 16.19 |
| 9. B.S. or B.A. only | 49 | 6.63 | 73 | 17.38 |
| 10. L.L.B. or J.D. with C.P.A. | 4 | .54 | 12 | 2.86 |
| 11. L.L.B. or J.D. only | 11 | 1.49 | 10 | 2.38 |
| 12. Less than B.S. or B.A. with C.P.A. | 2 | .27 | 1 | .24 |
| 13. Less than B.S. or B.A. only | 3 | .40 | 3 | .71 |
| 14. Other | 11 | 1.49 | 2 | .47 |
| Total | 739 | 100.00 | 420 | 100.00 |
| C.P.A.'s | 126 | 17.77 | 157 | 37.38 |

Textbooks

The AAA Committee did not include in its questionnaire a request for the names of textbooks used in the community colleges because information on this subject is readily available. For example, the unpublished survey of the AICPA Committee on Relations with Two Year Colleges found that the following textbooks are widely used:

| | |
|---|---|
| Principles of Accounting | 1. Niswonger and Fess<br>2. Pyle and White<br>3. Meigs and Johnson |
| General (Basic)Accounting | 1. Carson, Carlson & Boling<br>2. Brock, Palmer and Archer |
| Intermediate | 1. Simons and Karrenbrock |
| Cost Accounting | 1. Matz, Curry and Frank<br>2. Brock, Palmer and Archer |
| Managerial | 1. Moore and Jaedicke |
| Taxation | 1. Prentice-Hall<br>2. Bower and Langenderfer |

A survey conducted by Roscoe D. Perritt[22] in 1971 shows that 57 out of 75 junior colleges used Niswonger and Fess (76.00%). The next most popular elementary accounting text was Meigs and Johnson, used by 9.33% of the schools reporting.

Many of the senior colleges and universities use the same books. Perritt's study included 165 senior colleges and universities; of these, 46 used Niswonger and Fess, 45 used Pyle and White, while 21 used Meigs and Johnson. Whether the two types of schools cover the same material, or emphasize subject matter differently, is a matter which requires further research.

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[22]Roscoe D. Perritt, Analysis of National Survey on Elementary Accounting. (unpublished study). DeKalb,Illinois: March 15, 1971, p.76.

Two Separate Accounting Courses

Some community colleges offer two introductory accounting courses; one for students who wish to transfer to four year schools and the other for students who intend to seek employment at the end of two years. There were 39 community colleges out of a total of 241 answering this question who reported offering two separate courses. They were located in the following states:

| | |
|---|---|
| California | 11 |
| Florida | 4 |
| Illinois | 4 |
| Wisconsin | 3 |
| Kansas | 2 |
| Michigan | 2 |
| New York | 2 |
| Texas | 2 |
| Virginia | 2 |
| All other states (one each) | 7 |
| | 39 |

In some of these schools the transfer course is offered in the sophomore year while the non-transfer course is available to freshmen.[23]

The majority of the Committee favored the concept of the same course for all students, primarily to ease the transfer credit problem. Some members of the Committee felt that a less rigorous course could be justified for certain students. Such a course would be more vocational (i.e. more emphasis on bookkeeping) than the standard course.

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[23] Some educators define two-track programs as one program for transfer students and another program for "career" students, yet the same elementary course is taken by both groups. The Committee was interested in knowing if different elementary courses were offered.

One respondent to the questionnaire made the following statement in defense of two elementary courses:

> "We are giving a fair amount of emphasis to a 'less than college' level of accounting in the junior college. Some junior colleges call it bookkeeping, or applied accounting, or secretarial accounting. This level of accounting is not necessarily for the less bright student. It often is for the secretarial student or the mid-management student (who will probably be a typical small businessman when he finishes junior college). We need more recognition and encouragement for this course at the junior college level."

The majority of community colleges which offer a non-transfer course tend to use "College Accounting" books such as either Brock, Palmer and Archer (McGraw-Hill Publishing Company) or Carson, Sherwood, and Boling (South-Western Publishing Company).

Teaching Innovations

The Committee was interested in finding out to what extent the community colleges used methods or teaching techniques that might be considered new or innovative. Responses to a question on this subject included in the questionnaire mailed to chairmen of accounting departments at community colleges revealed that many were using the overhead projector as a visual aid. Fifteen schools (out of 241 reporting) were integrating accounting instruction with the computer. Other ideas listed were:

1. Programmed instruction
2. Placing taped lectures in the library for students who were absent or wish to review material.
3. Team teaching
4. Case studies
5. Internship and co-op programs
6. Use of closed circuit TV
7. Special honors course
8. Use of audio and visual materials for mass lectures.

The Committee also asked for a copy of outlines used in elementary accounting. Most of the outlines submitted appeared to be carefully prepared, covering the topics traditionally taught in elementary accounting. A number listed behavioral objectives, reflecting a trend encouraged by some schools of education.

Anita I. Tyra has suggested that community college instructors "tend to be heavily involved in teaching innovations" because of the "many hours they spend in instructing and teaching-related activities".[24] Professor Tyra points out:

> "The more spectacular innovations developed are occasionally reported in educational journals, however a large number of these innovations are not published because they are subtle in nature and are part of an ongoing process of improving instruction. Furthermore, many experiments in teaching innovations do not meet the methodological requirements of research. In general, accounting educators at the community college rarely think of scientific experiments, rather, they mainly wish to draw personal conclusions to improve their teaching."[25]

The Committee made no attempt to determine whether the community colleges are more or less innovative than the four year schools. This is a subject which requires further research.

How do Community College Students Compare with Non-Transfer Students?

Whether students who pass elementary accounting in community college perform as well as those who take the course in four-year institutions is another subject that requires, more research. The Committee reviewed two studies which indicate that students who begin at the four year schools are likely to perform slightly better, but the evidence

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[24] Tyra, op. cit. p. 35.

[25] Ibid.

is subject to so many qualifications that sweeping conclusions are not justified.

Faculty research at the University of Maryland suggests that

> "transfer students have more difficulties in their intermediate accounting year than non-transfer students. Grades of the former are materially lowered in their first semester's work, and a much higher proportion drop out of accounting before graduation, usually because of low grades. However, it appears that the transfer student with acceptable grades achieves about the same overall average at graduation as the non-transfer student."[26]

Instead of using grades earned in intermediate accounting as a yardstick for comparison, Krull gave the AICPA Level I test to both types of students as they enrolled in the first intermediate course at Western Michigan University and Michigan State University "to measure differences in elementary accounting achievement levels existing between transfer and non-transfer students".[27] He concluded that the non-transfer students scored higher than the students from the community colleges, even though the transfer students had a higher average (mean) grade-point average in elementary accounting than the non-transfer students. In addition, "final course grades in the first intermediate-level accounting course indicated that there was a highly significant difference in performances between transfer and non-transfer students."[28]

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[26] "A Comparison of the Performance of Transfer and Non-Transfer Students at the University of Maryland", Howard W. Wright, Unpublished, 1971, p. 12.

[27] Krull, op. cit. p. 12.

[28] Ibid., p. 139.

Another bit of evidence comes from an AICPA study:

"As measured by success in the CPA Examination, candidates who had been to two year colleges were not quite as good as candidates who had not been to two year colleges. The following table shows the degree of difference between the two groups of candidates (first sitters in the Exam) in May, 1970:

| | Passed all subjects (%) | Passed 3 subjects, all could take * | Passed 1 or more but not all for which eligible | Passed Nothing |
|---|---|---|---|---|
| Candidates with two-year college educations..... | 11.9 | 1.1 | 29.9 | 57.1 |
| Candidates without two-year college educations..... | 13.5 | 1.3 | 35.3 | 49.9 |

* In Connecticut, New York, and Texas.

"Probably the difference between the two groups of candidates may be attributed to easier admission standards of the two year colleges. A more positive and valid way of looking at the difference between the two groups would be to note that the percentage of students who have been to two year colleges, and pass all parts of the CPA Examination in the first sitting, is nearly as great as the percentage of those who have been only to four year colleges."[29]

Explanations that have been given for the differences in achievement level include (1) the "open door" policy of the community colleges and (2) "transfer shock", the period of adjustment required by the community college student to become adjusted to a new environment. It is quite possible that the community colleges

[29]Draft of a manual prepared by the Committee on Relations with Two Year Colleges, American Institute of Certified Public Accountants, pp. 2-3.

set standards of achievement at a level to prevent mass mortality; the alternative would be to cover all material necessary for competence regardless of the failure rate.

The four year institution has every right to expect that a transfer student is as well qualified in accounting courses previously taken as the non-transfer student. If there is no basis for deciding whether the transfer student is qualified, the four-year institution is justified in requiring an examination to establish competence to continue. It has been suggested that four-year institutions might well provide non-credit remedial type courses before poorly prepared students are permitted to go ahead with the regular program.

## ARTICULATION PROBLEMS CONCERNING COMMUNITY AND SENIOR COLLEGES

In order to be able to suggest ways of improving relations between two and four year schools, the Committee requested the help of respondents to its questionnaire in identifying areas of concern which might strain these relations. The following question was asked:

> "The Committee would appreciate any suggestions you have for improving relations between the community colleges and the four-year schools. What stumbling blocks exist? How can they be overcome?"

The question was designed to elicit free response rather than to make a quantitative study of the frequency of any "stumbling block." It was evident, however, that the major concern was the transfer credit problem: the community colleges objected to the fact that transfer credit for some courses, particularly intermediate

accounting, is not accepted by the four-year schools.

Community colleges also rejected the inference that their instructors are not competent. They opposed the attitude that the community colleges must follow the four-year requirements--"or else."

Other respondents made the following points:

> The variations in programs during the first two years at the four year schools is so great that it is not possible for community colleges to meet the requirements of every four year school their students might attend.
>
> The four year schools have little knowledge of what the two year schools are trying to do.

Most community college teachers felt that there was need for closer communication between the two types of schools. They stressed the thought that better understanding would come about through a greater exchange of information.

The following comments, selected from the replies of accounting department chairmen from the two year schools who answered the AAA questionnaire, reveal the attitude of a number of community colleges:

> "Students often come to the community college intending to take only two years. They want to be employable so they take four courses in accounting. Some do very well the second year. By living at home and working part time they earn enough to consider the other two years. Some of the senior schools object and will not grant credit for the third and fourth accounting courses. If the student knew as an entering freshman he was a four year student we might go along with the four year school and offer only two courses. In many cases the student does not know this. In fact his real interest and decision to major in accounting and go on to the four year school developed in the third and fourth accounting course. If the two year school had outlines, etc., from the four year school as to standards, we could be sure and cover the same material. We had no trouble a number of years ago."

"A student beginning accounting at a community college has a tremendous decision to make. If he intends to enter a two year institution and complete the final two years at a four year school, he pursues a liberal arts program during the initial two years, not an accounting program. If he intends to stop after two years, he would then pursue our associate degree program in accounting. How many students can make this decision in their first year? And why should the educational system penalize them for changing their minds?"

"The main stumbling block is the current trend of the four year state supported colleges to refuse acceptance of courses from junior colleges beyond the first year courses. To technically accomplish this the public four year institutions have moved course numbers up from the 200's to the 300's to make subjects like intermediate accounting and cost accounting non-transferable. As a result our graduates have been advised of the many private four year schools that will readily accept these courses. We are now seeing a trend whereby our students are transferring to non-public four year schools in order to get complete transferability of coursework."

"There should be no penalty for a student who attends a good junior college and who wishes to transfer to a senior institution. To complete graduation requirements, our transfer students will have to take an overload for three quarters (20 hours per quarter) or go an additional quarter just for a baccalaureate degree. This is absurd."

"...credit cannot be transferred to the four year school, even though the two year school may use the same text and even the same instructor!"

"Most Texas colleges and universities do not accept intermediate accounting from junior colleges. We would appreciate the AAA to further pursue this."

"The four year schools seem to dictate what is acceptable for transfer and what is not."

"Quite often we find four year schools saying, 'This is our program. These are the courses we will accept. Take it or leave it.'"

"We need some course content statement acceptable to AACSB for elementary and intermediate accounting courses in order to assure transferability of our courses. It would be helpful to have some guidelines or statements defining how an instructor should be prepared academically and professionally for our type of institution."

"The major stumbling block to better relations between the four year schools and the junior colleges is the feeling that the four year schools have, that junior college instructors are inferior with respect to knowledge, ability, and experience. This can be overcome by joint meetings..."

"The four year schools should review the curriculum of the two year schools to fully understand the quality of the program they have."

"Schools rely on AACSB statements of transfer of courses to discharge or deny principle courses in the community college. The number of hours in business which can be transferred and the selection of courses from which these hours can be earned should be negotiated between the two year and four year schools. Also, the four year schools are almost totally unfamiliar with the objectives and goals of the community college. I believe some type of a program where teachers from the four year and two year schools change places for a semester to get actual experience at the two types of schools should be encouraged and developed."

"We feel the first year student in accounting is not really ready to grasp the managerial implications of the subject."

"Community colleges are rarely kept informed of what the four year schools are doing. The four year schools often lack flexibility, are slow to change, and do not readily respond to or accept innovative ideas."

"The stumbling blocks are general meetings where everyone airs their views and all go about doing whatever they intended to do anyway."

"I have felt that the meeting we held between faculty, registrars, and personnel of concern between the two and four year schools were excellent. We had a chance to air our opinions on transferring problems. I feel it helped to change our line of thinking at both levels."

The Position of the Four Year Schools

Both the community colleges and the four year institutions are concerned with the evaluation and acceptance of credit when students transfer. The problem is particularly difficult when a student transfers from a two year "career" program which is typically skill oriented.

A major reason why many four year institutions refuse to accept for transfer some or all of the accounting courses taken beyond elementary accounting is that these institutions must follow the standards set by the American Association of Collegiate Schools of Business (AACSB) or face the loss of accreditation.

Community college teachers respond with two questions:

1. Who is the AACSB?

2. What right do they have to dictate to the community colleges what should be taught?

The answer to the first question is that AACSB is the only official accrediting agency for undergraduate and masters programs in business administration in the United States. While the AACSB does not represent all the schools offering baccalaureate and advanced degrees in business, nevertheless the status, prestige, and benefits that membership offers is so great that schools will not give up accreditation lightly.

As for the second question, the answer is that the AACSB does not dictate what is taught in the community colleges, especially in the two year programs. However, the AACSB has far reaching power to influence the curriculum, transfer credit policies, and the overall policies of member institutions (as well as those seeking membership). It is on the matter

of allowing transfer credit where the AACSB can, of course, exert influence over the business courses offered by the community colleges. The AACSB paid little attention to business offerings in the community colleges in the past, but with the growing importance of two year schools, this association formed a committee to examine articulation problems (Committee on Cooperation with Collegiate Junior Colleges). It is now considering the possibility of providing places in the AACSB Assembly and in the regional associations so that there would be greater communication and cooperation.

The following quotations from the Accreditation Standards of AACSB are significant:

> "In view of the increasing number of students who take work at the lower divisional level at an institution other than the degree-granting school accredited by AACSB, it is appropriate for the degree-granting institution to establish policies for the acceptance and validation of such transfer courses. In general the accredited degree school shall limit transfer credit for business courses which it applies toward its degree requirements, taken at a lower division level, to such courses as it offers at that level. Work included as part of the formal baccalaureate requirement by the degree-granting member school should be essentially of the same quality whether transferred from another institution or taken at the accredited school.

This is interpreted as follows:

> "For example, the courses transferred from another school and accepted to meet the baccalaureate requirements of a student should be of such quality as to permit the student to take course work at the next higher level in the same field without significant handicap. Likewise the overall educational experience of the transferring student should be similar in quality to that of the student taking all of his work at the accredited school."

The curriculum standards are set as follows:

> "An undergraduate school of business should concentrate its professional courses in the last two years of a four-year program, and should offer only a limited amount of work below the junior year. The objective of this is to permit the student to acquire a foundation of work on the basic arts and sciences. The arts and sciences foundation of the student should normally include work in mathematics, social science, humanities, and the natural sciences."

Interpretation:

> "Examples of the level of courses which might be offered at the lower division are: principles of accounting, principles of economics, business law, statistics, and introduction to business."

The decision to move away from offering professional business courses during the first two years of college followed publication of the Ford Foundation and Carnegie Foundation reports which severely criticized the quality of courses offered in collegiate schools of business. These reports concluded that an analytical foundation in the liberal arts and sciences would best equip students to pursue the professional study of business.

Many community colleges have accepted this point of view and counsel their students accordingly. Westark Community College of Fort Smith, Arkansas, advises its students that:

> "Principles of Accounting is a sophomore course in most of the area colleges and should therefore be taken during the second year at Westark. Some of the schools do not like to accept the course on transfer from another school if it was taken during the freshman year. The student should not risk the danger of being required to repeat the course. The student just out of high school not interested in transfer credit who wants immediate bookkeeping training will usually find 2553 Introduction to Accounting more appropriate for his needs. More mature individuals with some business experience and a good background in practical business arithmetic have no trouble taking accounting during the freshman year."

Opposition to the AACSB position includes the following arguments:

1. The concept of offering professional level courses largely in the last two years of a four year program has never been validated.

2. The community colleges feel their faculties are just as competent as their counterparts in four year institutions, and their students are just as capable of absorbing the theories and practices taught in the various areas of business administration. Their students are given more individual attention and advisement than in the larger four year colleges and universities where the heavy responsibilities for teaching, in some cases,are assigned to graduate students pursuing advanced degrees.

3. Where schools are state related and funded, partially by state and local government, and where curricula has been approved by a state board of regents (or equivalent governing body), a real conflict of interest exists ff the credits (or the associate degree) earned at the community college are not completely accepted by the four year schools.

4. Because of the freeze on enrollments at a number of four year schools, more and more students are being directed, of necessity, to pursue their first two years at a community college. These students expect that if they continue their education by transferring to a four year institution they will be given credit for all work completed satisfactorily at the community college level.

This point of view has been expressed by a number of junior college boards of trustees in this manner:

"1. In planning curriculum in higher education, the student should be able to transfer from a community college to a senior college and (that) the student should neither lose credit nor lose stride.

2. The state should provide for student mobility with a minimum of penalty."

This last statement recognizes the fact that students transfer from one four year institution to another as well as from a two year to a four year school. Students also transfer from four-year schools to community colleges.

In several states community college teachers have been pressuring the state legislators to require the transfer of the associate degree with no loss of credit. In a number of states teachers from two year schools may have "political clout" with a larger number of legislators than the teachers from the senior institutions. "Hometown pride" as well as the persuasion of parents of two-year students are other factors which influence legislators.

Recognizing this, the AACSB Committee on Cooperation with Collegiate Junior Colleges made the following recommendation at the annual meeting of AACSB in May, 1972:

> "From an analysis of material received in response to the Association's request for articulation agreements between two-year and four-year institutions, it is apparent that pressures are increasing to require the transfer of the Associate degree with no loss of credit. It is the committee's opinion that there is considerable merit behind this thrust and that there is much to be gained from preventing loss of credit. It recommends, therefore, that the Standards Committee consider developing a standard pattern for the Associate degree which could be adopted by the membership as a pattern which would be accepted from two-year institutions without loss of credit.
>
> "It is the consensus of the committee that the Association can function in an important leadership role as outlined above and, therefore, help forestall further legislation by states that would make mandatory the acceptance of Associate degree work."

It should be emphasized that this recommendation is under consideration but has not been adopted by AACSB at the time of the completion of this report.

The deans of the business schools in the State of Illinois prepared an articulation statement which was scheduled to become effective in September, 1972. They agreed to accept the following courses as lower division transfer credits and as course equivalents, to the extent that individual curriculum require such courses:

a. Principles of Accounting--6 semester hours;
b. Cost Accounting--3 semester hours;[30]
c. Principles of Economics--6 semester hours;
d. Business Statistics (if college algebra is required as a prerequisite)--3 semester hours;
e. Basic Computer Course-- 3 hours;
f. Introduction to Business--3 semester hours;
g. Business Law--3 semester hours;
h. Business Law (a second course if comparable to course offered at the four-year institution)--3 semester hours.

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[30]"Cost Accounting normally offered at the upper division in the four year schools will be accepted as transfer credit without validation. This exception was made because the teachers in accounting in both the community colleges and four year schools recommended it and because there is research to indicate that students who take Cost Accounting at the lower division do satisfactory work in subsequent courses. The acceptance of Cost Accounting represents a violation of accreditation standards, but by appeal an exception was granted to the schools in the State of Illinois by the AACSB."

(Letter from Dean F. Virgil Boyd of Loyola University of Chicago to Dr. James Holderman, Director, Illinois Board of Higher Education, dated May 24, 1972.)

The deans of the Illinois business schools rejected the suggestion of the community colleges that Intermediate Accounting, and the first courses in Finance, Marketing, and Management be accepted for credit. In the words of Dean Virgil Boyd:

> "These courses are upper division courses at four year schools. In so doing, we would violate what we believe to be a good basic philosophy of education for business; namely, that the bulk of the professional work should be taken at the upper division with a broad base of general education at the lower division. The acceptance of credit in these three areas would make it possible for a student to take approximately 1/2 of his required business work as lower division work. We do not believe this to be an acceptable point of view.
>
> "Please understand that this articulation statement does not restrict community colleges in their offerings. Courses beyond those listed in our plan perhaps should be offered to meet particular needs in particular communities. Our plan relates to transferability of credits only."[31]

It is difficult to determine at this time whether the AACSB position on limiting the number of business courses taken in the first two years of college may be relaxed in the case of community college students.

The AACSB Committee on Cooperation with Collegiate Junior Colleges endorsed and recommended to the Standards Committee the following guidelines on the role of testing to validate transfer credit contained in Guidelines for Improving Articulation Between Junior and Senior Colleges published by the Joint Committee on Junior and Senior Colleges of the Association of American Colleges, American Association of Junior Colleges, and the American Association of Collegiate Registrars and

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[31] Ibid.

Admissions Officers:

> "A. Receiving institutions should not require transfer students to take examinations to validate credit earned in junior college courses which the two types of institutions have agreed are parallel or equivalent.
> B. Transfer students may reasonably be asked to take achievement examinations, the results of which are used to place them at the appropriate level, in various sequences of courses which they may have begun in junior colleges.
> C. Examination results may also be used as a basis for awarding credit or waiving degree requirements for junior college courses which might not otherwise transfer or for out-of-school experience."

It should be emphasized that the AACSB has not officially adopted the above statement at the time this report was written.

Can the Opposing Views be Reconciled?

The root of the transfer credit problem lies in the fact that community colleges are oriented to meet the needs of two year students, many of whom do not go on for the baccalaureate degree, while the four year schools design their curriculum on the assumption that all students will attend a full four years.

Many community college students, especially in accounting, start out on a two year program, and later decide to continue their education. Some may be "late bloomers". Others seek the greater job opportunities, the higher salaries, and the status symbol attached to the four year degree. The two year program in accounting is unquestionably more rigorous than many of the other two year programs; the student who completes such a program often finds it is now possible and desirable to continue beyond his original expectations.

There certainly is no quarrel with the community colleges that offer advanced courses for those who have no intention of applying these courses toward a degree. They serve a useful purpose in serving students employed in industry, government, service work, etc. These courses are a part of continuing education so vital to the advancement of adults.

The difficulty is in handling the student who decides to pursue a baccalaureate degree after completing a two year career program in accounting. Should this student be penalized?

There are some who say, "Yes. The student was counseled as to his options and if he later changes his objectives, he should accept the consequences."

They further argue: "If this stand is not taken, community colleges will be tempted to encourage students to take as much accoun ting as possible in the first two years, even if they plan to transfer, and thus defeat the objective of acquiring a solid foundation in the liberal arts prior to going ahead with the study of professional business subjects."

Last year's AAA Committee on the Junior (Community) College Curriculum (1970-71) recommended that credit should be given for all knowledge previously acquired, whether through experience or course work:

> "Education is valid regardless of where or how it is learned...[32] Transfer credit should be based on what a student has learned rather than the courses he may or may not have taken. Students who have gained a great deal from a specific course should be granted credit, while those who have gained little from the same course should be required to repeat the course or to fill the gaps with self-study.

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[32]Report of the Committee on Junior (Community) College Curriculum in Accounting, 1970-71. Supplement to Vol. XLVII, 1972, p. 166.

> "The school receiving a transfer student should consider the competence of the individual in terms of his life goals and the career path he chooses to take. This point of view permits the student to transfer from one career path to another without loss of either experience or educational background. In short, accept the student where he is, give him credit for what he has accomplished (this may mean achievement tests) and allow him to go forward instead of irrevocably closing the door to his advancement. Instead of measuring education in terms of hours, education should be measured in terms of level of competence."[33]

The 1970-71 Committee explained that if a community college student decides to prepare for a para-professional position in accounting, he would have to acquire certain knowledge and skills. Should he change his career objectives, he would then have to acquire additional knowledge and skills for use at a higher level.

Acquiring the "common body of knowledge", important as this may be, is not enough. Education for accountancy at any level requires much more than knowledge of subject matter. The curriculum must provide the student with an opportunity to develop analytical and problem solving skills. The student must learn how to find answers in the future to questions that were not raised in school; he must gain an understanding of management skills, and above all, he must learn how to work for and with people.[34] Developing these skills is the responsibility of the total educational institution and not just the accounting faculty. Ignoring these skills impedes a student's future. This is a more costly blunder than to require him to repeat a course.

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[33] Ibid., p. 170.

[34] Ibid., p. 170 (adapted).

## TESTING AS A MEANS OF VALIDATING CREDIT PRESENTED FOR TRANSFER

Some community college instructors would like to have senior institutions accept all transfer credits at face value. If such were the case, the two-year schools would have little incentive to counsel their students to follow the guidelines of AACSB. Some community college teachers would encourage their students to take more and more accounting with them.

A student with superior grades in the community college may be allowed to transfer all credits without examination, particularly when the four year school has close relations with the two-year school, knows the faculty, the curriculum, and the type of student it produces.

Some schools allow transfer students to take what would normally be the next course with the provision that credit for accounting courses taken in the community college will be withheld until the student has passed an advanced course. Students with relatively low grades in community college would have to take an examination to show readiness to go ahead.

A number of four year schools give a qualifying test to all transfer students (from both two and four year schools) who request credit for courses above the elementary level. One reason for doing this is that even the elementary courses are not all alike, so the four-year institution wants to be sure the transfer student has covered the same material offered to its own students.

It is often pointed out that senior institutions almost invariably accept transfer credit for psychology, English, mathematics, and other courses. The question is then raised: Why is accounting singled out for special treatment?

There are two answers:

1. If the student is not ready to take advanced material, he is likely to be unsuccessful. Placement tests in accounting may be compared with similar tests in the languages or secretarial science. Their purpose is to help the student by not allowing him to take courses beyond the level of his ability.

2. The degree granting institution wants to protect the "integrity" of its reputation for turning out qualified students. Unless the transfer student takes an acceptable number of courses in the accounting department of the senior institution, the department has no way of knowing the qualifications of the student.

Some schools permit students to "challenge" any course in the curriculum, that is, take a comprehensive test to prove his knowledge of any given course. This practice is similar to the idea behind the "University Without Walls" concept which has been receiving so much publicity recently. The idea however, is not new, the University of Chicago allowed credit without taking course work more than 35 years ago.

The subject of testing to validate transfer credits raises a number of issues:

1. Should an achievement test be given to all transfer students or only to those planning to take more accounting?

2. Should the test be given in the community college, when the student has just completed the course, or later, when he transfers?

3. Is a similar test given at the same time to students who started at the four-year institution? Unless it is, the testing program is likely to discriminate against transfer students.

4. What should be done with the student who studied accounting in the past, say five years ago? Should he prove his readiness to go ahead?

5. Would the use of a standardized test result in the junior colleges structuring their courses for the primary purpose of passing the test? Would it discourage experimentation to meet individual needs?

Assuming that a four-year institution decides to use placement tests to measure achievement in elementary accounting, it has three choices:

1. Develop its own test.
2. Use the AICPA-Level I test.
3. Use the CLEP test.

The first choice has the advantage of covering those topics and concepts the school stresses in its own courses. A generation ago accounting courses were quite similar with respect to content. Today this is not the case. The test might be a final examination, but it needs to be comprehensive in nature. To be fair, transfer students should not be expected to score higher than the non-transfer students. The time when the test is given must also be taken into account. It would not be fair to give a test to the non-transfer student in May or June and expect the transfer student to do as well in September.

The AICPA - Level I test has been a part of the College Accounting Testing Program given by the American Institute of Certified Public Accountants for more than 25 years. A total of 290 colleges participated in the overall testing program in the academic year ended June 30, 1971; close to 30,000 tests were administered. More than 13,000 students took the two versions at 70 junior colleges.

One version is a 50 minute, 45 multiple choice test, while the longer version requires two hours and includes 60 items. Both tests measure the achievement of those who have had one year of accounting. The test emphasizes concepts in financial, managerial, and cost accounting, de-emphasizing bookkeeping techniques. Testing is a joint venture of the AICPA Testing Project office and the Psychological

Corporation, a professional testing service. Reports are issued which include frequency distributions, medians, and quartiles, as well as national percentile norms.

It is significant to note that the medians and quartiles attained by the 70 community colleges that used these tests in 1971 are just a few percentile points below the medians and quartiles reported for all other types of colleges. Information about this program may be obtained from the AICPA testing project office, 304 E. 45th Street, New York City, New York, 10017.

At the present time there is little evidence that four year schools are using the AICPA tests to validate transfer credits. However, some of the community colleges are giving the test and recommending that students report the scores to the schools where they transfer.

The College Level Examination Program (CLEP) includes a test containing approximately 80 multiple choice questions to be answered in 90 minutes. There is also an optional 90 minute essay section containing six questions. While national norms have been prepared, there have been only two years of experience with this test.

Testing to Validate Credit for Advanced Courses

The only standardized test presently available for measuring achievement beyond the elementary level is the Level II test prepared by the AICPA. It is designed to be taken near the end of the senior year as it includes topics taken from intermediate and auditing courses.

Since the Level II test is comprehensive, it is not satisfactory in measuring achievement in any one course. It is therefore recommended that a four year institution prepare its own tests if it wishes to examine transfer students before granting credit for intermediate accounting and other advanced courses.

Institutions using the Level II test should be encouraged to compare the performance of transfer students with non-transfer students.

Progress of Articulation Efforts

The transfer credit problem is just one of many problems that need to be solved if higher education is to reach the goal of facilitating the smooth flow of students from one institution to another. It is imperative that faculties from both types of schools meet regularly to exchange information about program objectives, course contents, student qualifications and student needs. Hopefully, these meetings will produce understanding of each other's problems, and from understanding, compromise or solutions.

At the national level such organizations as the American Association of Junior Colleges, American Association of Collegiate Schools of Business, the American Institute of Certified Public Accountants, as well as the American Accounting Association have taken active roles in promoting better understanding.

In a number of states, boards of higher education, by holding the purse strings, have "persuaded" the two types of institutions to get together. These boards usually start out with broad recommendations that:

1. Each university department list and update the requirements for each program leading to the baccalaureate degree and publicize these requirements for use by all other institutions in the state.

2. Each university include in its catalog a section stating all lower division prerequisite requirements for each upper division specialization or major program.

Then the boards move into such guidelines as the need for counseling and communication and the need for continuous research to follow up the achievement of transfer students. Some boards run into resistance from the four year schools on the recommendation that the associate degree be accepted without loss of credit. This could put a four-year school into the position of having to allow transfer credit for intermediate accounting at the risk of losing accreditation with the AACSB.

The AAA Committee included in its questionnaire a request for a list of all organizations (irrespective of field of study), that were concerned with promoting cooperation between two and four-year schools. A list of the replies appears in Appendix A. From the length of the list, and the fact that they were identified by community college teachers, it is evident that there are many state associations of accounting teachers that are discussing the problems of the community colleges. The Committee applauds these efforts.

After considerable study of the problem, the Committee has come to the conclusion that the most effective way of achieving better understanding between two and four year schools is on a one-to-one basis; it has seen good evidence of this in California, Oregon, New York, and Florida. Organizations on the state and national level help to provide guidelines and perspective, but the best results can be accomplished when the faculty of a two year college sits down and talks things over with the faculty of a four year institution to which its students transfer.

Recommendation for a Professional Development Program for Community College Teachers

Community college instructors are sometimes criticized for using a traditional approach to the teaching of accounting. They are criticized for overemphasizing procedures or mechanics of acccunting and for giving insufficient attention to the interpretation and use of accounting data in business decisions. The Committee does not believe that this is a valid criticism of all accounting instructors in community colleges, but it does acknowledge that it is valid with respect to some accounting instruction in some community colleges.

The Committee also believes that two of the principal reasons some community college instructors have not changed their approach to teaching accounting is that they are either not familiar with new approaches or they lack adequate background themselves to successfully handle new subject matter now being offered in some accounting

courses. An instructor cannot, for example, lead his students in a critical and analytical discussion of the matching concept of income unless he is able to compare this concept with alternative concepts. Unless he is familiar with alternative concepts of income and value, particularly value based on discounted cash flows, and unless he feels at home in discussing this material, he is unlikely to venture from what is familiar to him and where he feels most comfortable—i.e., in the mechanics or procedures of accounting.

Community college instructors typically spend 15 to 18 hours per week in the classroom plus a great deal of time counseling students, grading homework papers and examinations, and other duties directly related to teaching. They normally have little time left for research activities, professional development, and keeping abreast of new developments in the theory, practice and teaching of accounting. The problem is compounded by the fact that many community college instructors have had little graduate education in accounting. Much of what they did have was often years ago when a more mechanical approach was typically used in graduate education than is true today.

AAA meetings, particularly regional meetings, have sometimes contained sessions on accounting instruction, particularly in the elementary course, which have appealed to community college instructors. These sessions are helpful and should be encouraged, but are inadequate to meet the great need for professional development of

community college instructors. The professional development courses sponsored by the AAA in behavioral sciences, quantitative methods and accounting research have no doubt resulted in the enrichment of accounting instruction by many participants, but these courses have done little for the community colleges.

The Committee believes that a program of professional development is needed to enrich accounting instruction in community colleges and has devoted substantial effort to considering what role the AAA should play in such a program.

Initially the Committee was of the opinion that the AAA should offer a two week professional development course for community college instructors on a national basis. After discussing the proposed course with community college instructors and administrators, the committee now believes that these courses would be more effective if offered on a regional basis.

There are several reasons for recommending professional development courses on a regional basis. First, if all of the participants were from the same geographical area and if most of the discussion leaders and faculty were from the same area, the course would be an effective means of facilitating communication between the faculties of two year and four year colleges. Discussion of the objectives of the introductory accounting course in a seminar setting, for example, would no doubt increase the understanding of all participants of the problems of both two year and four year colleges.

A second reason for promoting professional development on a regional basis stems from the nature of the incentive pay scale of community college instructors in some areas. In the State of Washington, for example, the salary level of instructors who have not earned a doctorate (and this includes most faculty members) typically is a function of the number of credit hours earned beyond the bachelor's or master's degree. A salary scale of this type would, of course, encourage instructors to enroll in programs that provide college credit. It does not seem feasible to offer college credit for an AAA summer program. The Committee felt that it might, however, be possible to offer college credit if it were offered through a university.

Economics is a third reason. Travel expenses of those participating would, of course, be less and the sponsoring university would probably pay part or all of the instructional costs if the course were offered for credit or part of the regular summer school or extension program.

The Committee believes that a principal objective of professional development courses for community college instructors should be to encourage sensitivity to new approaches to accounting instruction and other related subjects. Merely exhorting community college instructors to change or prescribing how they should change does not guarantee that the objectives will be accomplished. The Committee's recommendation is predicated on the philosophy that some of the new approaches to accounting instruction are so interesting

and challenging that if participants became sufficiently familiar with them they will want to introduce them in their own courses.

Considerable additional work is needed to launch a professional development program for community college instruction. The American Accounting Association should attempt to get courses underway, perhaps on an experimental basis, at several universities. Professor O'Rourke at Portland State College in Portland, Oregon, offered a one-week professional development course for Oregon community college instructors during the summer of 1972 which carried no university credit. The cost to participate was $60. The results of this effort should be studied by the Executive Committee so that others can profit by the experience.

## SUMMARY AND RECOMMENDATIONS

The community college has emerged in the twentieth century to make a unique contribution to post-secondary education. In the area of accounting, the community college plays a dual role in training paraprofessionals as well as providing the foundation work for those who intend to continue their education at a senior institution.

Both the community colleges and the four year institutions offer basic accounting courses for all students who need a knowledge of accounting. In addition, the four year schools and the graduate schools offer education designed to meet the "common body of knowledge" requirements for industrial, governmental, and professional accounting.

In offering courses for the declared transfer student, the community college can teach the beginning part of the common body of knowledge. In addition, the community college has a contribution to make by training students interested in a two year "career" program. It can also serve as a center for continuing education. The Committee endorses a statement made by the AICPA Committee on Relations with Two Year Colleges: "The beginning preparation for professional accounting also serves best, generally, as career preparation for a paraprofessional job."

There has been some question as to the need for two year programs in accounting in the community colleges. The Committee has come to the conclusion that there are sufficient employment opportunities in industry, government, and small business for graduates of two year curricula to

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Draft of a manual prepared by the Committee on Relations with Two Year Colleges, American Institute of Certified Public Accountants, p. 8.

justify such programs. There is not likely to be much demand for two year graduates in public accounting because the profession requires the bachelor's degree for the certificate; however, there may be a limited number of opportunities in small public accounting firms doing write-up work. Despite the increased use of the computer, there will continue to be a need for clerks, bookkeepers, and paraprofessionals in business and government.

This year's Committee, like its predecessors, decided not to recommend a specific accounting curriculum for two year students on the grounds that flexibility is desirable to meet local needs. Advisory boards are helpful in offering suggestions and providing employment, but the community colleges should guard against the tendency to place too much emphasis on highly specialized courses at the expense of a broader education which students need in order to advance as well as to achieve mobility.

When students transfer from a two-year college to a four-year school, problems arise which require a high degree of cooperation and understanding on the part of both types of institutions. On the matter of transfer credits, the Committee recommends that:

1. If a community college student knows that he is going to transfer to a four-year school, he should be counselled to take only one year of accounting.

2. If the community college student completes a two year career program and then decides to continue for the bachelor's degree (many do so), a fair evaluation (such as a placement examination) should be made to minimize the loss of credits. In those cases where the four year institution is thoroughly familiar with the work of a specific community college, transfer credit may be granted automatically. However, this should not be treated as an open invitation to potential transfer students to take an excessive number of accounting courses in the community college.

There needs to be continuous two-way communication between the two and four year schools so that each can understand the objectives and programs of the other. Faculty should visit other campuses periodically. It has been suggested that there should be an interchange of faculty, although this may not always be feasible.

The American Accounting Association, along with the American Institute of Certified Public Accountants and the American Association of Collegiate Schools of Business, need to work jointly and separately in bringing together teachers from both types of schools. The following recommendations apply specifically to the AAA:

1. The AAA should sponsor workshops, seminars, and/or courses that would acquaint community college teachers with innovative teaching methods as well as the significant concepts developed in recent years. To be most effective, these programs should be offered on a state or regional basis, preferably for college credit as an incentive to those teachers whose salary increments are dependent upon continuing education. Representatives from the two and four year schools should have an opportunity to work together in these programs.

2. The AAA should step up efforts to attract community college teachers to the regional and national meetings.

3. A membership drive should be directed toward attracting more community college teachers. A Committee survey indicated that a significant number of community college teachers felt that there was little to gain by joining. Others were waiting to be asked to join.

4. Most community college teachers are not interested in the present content of The Accounting Review, feeling that the articles are too theoretical or too research oriented. Consideration should be given to a separate publication for the undergraduate teacher or to devote more space to topics of interest to community college teachers.

5. The AAA should appoint a permanent committee to work with the two year colleges. When a new committee is appointed each year, there is a lack of continuity which hinders the attainment of long-term goals. While there should be rotation of membership to a limited extent, nevertheless a longer period of service is highly desirable.

Sources outside the Committee have suggested that the AAA serve as an accrediting body for two-year programs. The AAA does not aspire to accredit either two or four year programs, and the Committee concurs with this position; AAA is not an accrediting association. Should the AACSB attempt to accredit community colleges? For a number of reasons, the Committee thinks not.

Much information not presently available would contribute to a better understanding of the relations between two and four-year schools. Some of the research may be done by the institutions involved; other studies may be appropriate for doctoral dissertations. The bibliography following this report has been designed to encourage and facilitate further research. The Committee suggests that some of the topics that may be explored are:

1. Follow-up the graduates of the two-year programs. Where do they go? How much do they earn? How many transfer to four-year programs? Why did they choose to continue their education instead of going to work?

2. How well do transfer students perform in advanced accounting courses at the four-year schools? (Consider separately those who had one year of accounting and those who had more at the community colleges).

3. What is the academic preparation of the community college teachers to teach the upper level courses (i.e., intermediate, taxation, etc.)? Studies to date of the academic background of community college teachers have not made a distinction as to level of courses taught.

4. How valid is the statement that professional accounting courses should follow a foundation of general education courses? (This is the premise underlying the AICPA and AACSB recommendations dealing with four and five year programs).

# APPENDIX A

## ORGANIZATIONS CONCERNED WITH PROMOTING COOPERATION BETWEEN TWO AND FOUR YEAR SCHOOLS

### State Organizations

ALABAMA

Alabama Council on Higher Education in Business
Alabama Business Education Association
Alabama Association of Junior Colleges
Business Educators Temporary Continuation Committee

ARKANSAS

Southwestern Business Administration Association

CALIFORNIA

California CPA Foundation for Education and Research

COLORADO

Colorado Association of Community and Junior Colleges - Instructional Deans Unit

FLORIDA

State Department of Education - Committee on Junior College Affairs

GEORGIA

Georgia Association of Accounting Instructors
The Regents' Committee on Business Administration, Economics and Industrial Management
Georgia Association of Junior Colleges
Georgia Association of Accounting Instructors

ILLINOIS

State of Illinois Teachers of Accounting

IOWA

Accountants Association of Iowa

KANSAS

Kansas City Regional Council on Higher Education
National Association of Management Educators

MICHIGAN

Michigan Accounting Educators

MISSISSIPPI

Mississippi State Department of Education
Mississippi Public Junior College Association

NEW YORK
Council of Business Faculty Administrators

NORTH DAKOTA
North Dakota Accounting Teachers Association

OHIO
Ohio Association of Two Year Colleges
Ohio Organization of Technical Institutes

OKLAHOMA
Oklahoma Accounting Education Association

PENNSYLVANIA
Pennsylvania Association of Accounting Educators

TEXAS
Texas Junior College Teachers
North Central Texas Accounting Educators Conference

VIRGINIA
Annual seminar sponsored by Virginia Polytechnic Institute and State University - "Trends in the Education of Accountants"

## National Organizations

American Institute of Certified Public Accountants (including state societies)
Committee on Relations With Two-Year Colleges

American Accounting Association (including regional groups)
Committee on Junior (Community) College Curriculum

American Association of Collegiate Schools of Business
Committee on Relations With Two-Year Colleges

## Regional Organization

Missouri Valley Conference on Cooperation Between Junior and Senior Colleges (Arkansas, Illinois, Iowa, Kansas, Missouri, Nebraska, and Oklahoma)

# BIBLIOGRAPHY

## Periodicals

American Accounting Association. Report of the Committee on the Accounting Curriculum for Junior and Community Colleges. John Everett Royer, Chairman. A supplement to The Accounting Review, 45:10-43, 1970.

American Accounting Association. Report of the Committee on Junior (Community) College Curriculum in Accounting. Harold L. Royer, Chairman. A supplement to The Accounting Review, 47:164-185, 1972.

Bachman, Joseph et al. "Accounting Profession and the Junior College: How CPA Firms Can Help Improve Accounting Instruction," Illinois CPA, 29:20, Autumn, 1966.

Bachman, Joseph W. "Trends In the Elementary Accounting Course," Collegiate News and Views, 20:11-13, March, 1967.

Bashaw, W.L. "The Effect of Community Junior College on the Proportion of the Local Population Who Seek Higher Education," The Journal of Educational Research, 58:327-392, March, 1965, Vol. 58.

Beals, E.W. "Changing Criteria for Community College Transfers," Journal of the National Association of College Admission Counselors, 16:22-34, May, 1971.

Beck, J.M. "Trends in Semiprofessional Curriculums," Junior College Journal, 28:374-378, March, 1948.

Birnbaum, Robert J. "Why Community College Transfer Students Succeed in Four-Year Colleges - The Filter Hypothesis," Journal of Educational Research, 63:6:247-249, February, 1970.

Birnbaum, Robert. "Open Door College or Curriculum?" Junior College Journal, 42:25-27, November, 1971.

Blocker, Clyde E. "Purposes, Growth, and Transition of the Community College," National Business Education Quarterly, 36:2:4-7, December, 1967.

Bradish, Richard D. "Course Content in Elementary Accounting," Collegiate News and Views, 20:13-17, March, 1967.

Bucci, F.A. "Academic Performance of Transfer Students from Two-Year Colleges," National Association of College Admission Counselors, 15:10-11, May, 1970.

"Business Education and the Two-Year Community College," National Business Education Quarterly, 36:2:1-70, Winter, 1967-68.

Conley, William H. "Accounting in the Junior Colleges," Accounting Review, Volume 14, 14:22-26, March, 1939.

Deakin, Edward B. "Problems with Junior College Accounting," Journal of Business Education, 46:57-58, November, 1970.

Dennison, John and Gordon Jones. "The Mature Student and the College Transfer Program," Continuous Learning, 8:4:189-192, July - August, 1969.

Dent, Honorable John H. "New U.S. Civil Service Standards for Accounting Technicians," The Balance Sheet, May, 1965.

Eells, W.C. "Vocational or Semiprofessional," Junior College Journal, 9:61-62, November, 1938.

Erickson, C.G. "Community College: Keystone for Change," Junior College Journal, 40:12-15, March, 1970.

Frank, N.H. "Changing Requirements for Technical Education," American Vocational Journal, 42:21-22, April, 1967.

Gersten, Robert S. "Community Colleges: A View From the Field; Study of 45 Campuses Reveals Plans, Problems, Progress," College and University Business, 44:53-55, April, 1968.

Gleazer, Edmund J. Jr. "Junior Colleges in the United States: Trends and Directions," National Business Education Quarterly, 36: 58-62, Winter, 1967-68.

Grech, Charles W. "The Two-Year Community College Student and Automation of Accounting," National Association of Accountants Bulletin, 44:43-48, August, 1963.

Glueck, William F. "Choice of Business Vocation and the Transfer Problem," Vocational Guidance Quarterly, 18:3:212-217, March, 1970.

Haines, P.G. and John Carmichael. "A Point of View About Program Development in the Community College," National Business Education Quarterly, 35:274, Summer, 1967.

Hammes, Richard R. "Characteristics Related to the Success of the Transfer Program of the University of Wisconsin, Center System," Journal of Educational Research, 62:9:415-421, May - June, 1969.

Harris, N.C. "Major Issues in Junior College Technical Education," Educational Record, 45:128-138, September, 1964.

Hartman, E.L. et al. "Academic Achievement of Junior College Transfer Students and Native University Students," Journal of College Student Personnel, 10:378-81, November, 1969.

Heins, Everett B. "A Survey of Accounting in Junior Colleges," The Accounting Review, 41:2:323-326, April, 1966.

"Higher Education, 1980: New Federal Projections," The Chronicle of Higher Education, 6:28:1, April 17, 1972.

Hills, John R. "Transfer Shock: The Academic Performance of the Junior College Transfer," Journal of Experimental Education, 33:3:201-216, Spring, 1965.

Hills, John R. "Evaluating Transfer Applications," College and University, 40:3:241-248, Spring, 1965.

Hill, J.R. "The Computer: A Versatile Tool for the Community College," Peabody Journal of Education, 48:294-299, July, 1971.

Hoyt, Donald P. "Junior College Performance and Its Relationship to Success at Kansas State University," College and University, 35:3:281-291, Spring, 1960.

Hudesman, J. "Predictive Validity of Strong Vocational Interest Blank Applied to Accounting Students in an Urban Two-Year College," Journal of Counseling Psychology, 17:67-69, January, 1970.

Hudson, M.L. and E.P. West. "The Junior College and Its Business Curriculum," Eastern Business Teachers Association Yearbook, 39:99-100, 1966.

Irvin, Donald D. "Accounting and the Use of the Computer," Business Education Forum, 24:12-15, December, 1969.

Jeanroy, Donald L. "Junior and Community Colleges: What Are Their Placement Needs," Journal of College Placement, 30:4:99-100, April - May, 1970.

Johnson, Lamar. "Junior College Innovation and Teaching Improvement," Improving College and University Teaching, 17:73-76, Spring, 1969.

Keller, William D. "Accounting Requirements - A Survey and A Reaction," (Four-year program), Business Education Forum, 24:15-16, December, 1969.

Kelly, R.L. "Accounting Curriculum (of a community junior college)," National Business Education Quarterly, 36:25-32, December, 1967.

Kintzer, F.C. "Education of Semiprofessionals Is On The Move," Junior College Journal, 35:19-23, May, 1965.

Kolmin, F.W. and R.M. Clark. "Toward More Effective Teaching in Professional Areas," Improving College and University Teaching, 19:207-210, Summer, 1971.

Lewis, I.G. "Problems in the Admission of Community College Transfer Students," College and University, 43:589, Summer, 1968.

Lindsay, Carl A.; Marks, Edmond; and Hamel, Lester S. "Native and Transfer Baccalaureate Students," Journal of College and Student Personnel, 7:1:5-13, January, 1966.

Lombardi, John. "Occupational Education in California's Junior Colleges," The Educational Record, 45:142-7, Spring, 1964.

Lotz, J.F. "Junior College Means Business," Journal of Business Education, 40:129-30, December, 1964.

Martorana, S.V. and L.L. Williams. "Academic Success of Junior College Transfers at the State College of Washington," Junior College Journal, 24:7:402-415, March, 1954.

Mathison, K. et al. "Junior - Senior College Transfer Problems," College and University, 44:751-753, Summer, 1969.

McCosh, R. Bruce. "Television - Assisted Instruction in Accounting," (Colorado State University), Journal of Business Education, 45:274-76, April, 1970.

McFarland, H. Neill. "Revolutionary Venture Between a Tech School and University," Computing Newsletter, School of Business Administration, University of Colorado, Colorado Springs, Vol. IV, April, 1971.

Menacker, J. et al. "Are Junior College Transfers Second - Class Citizens?" National Association of College Admission Counselors Journal, 14:4-9, November, 1969.

Meskill, V.P. "Transfer Student Performance and Admissions Policies and Practices for Transfers," Journal of the National Association of College Admission Counselors, 16:23-24, July, 1971.

Myran, G.A. "What a Community College Has To Offer," Business Education World, 44:15,35, May, 1964.

Nickens, John. "The Effect of Attendance at Florida Junior Colleges on Final Performance of Baccalaureate Degree Candidates in Selected Majors at The Florida State University," College and University, 45:281-288, Spring, 1970.

Ogilvie, William K. "Occupational Education and the Community College," Educational Leadership, 22:244-64, January, 1965.

Orr, David B. "Considerations, Costs, and Returns in a Large-Scale Follow-Up Study," Journal of Educational Research, 58:373-378, April, 1965, Vol. 58.

Perel, W.M. and Philip D. Yairo. "The Community College and the College Parallel Program," Journal of Higher Education, 40:1:47-52, January, 1969.

Pillsbury, Dr. Wilbur F. "A Computer-Augmented Accounting Course," Collegiate News and Views, 24:1-4, October, 1970.

Priest, B.J. and H.D. Holt. "Community College Outlook for the '70's," Compact, 4:34-35, August, 1970.

Randall, Robert F. "Businessmen Counsel Educators on Accounting Courses," (Middlesex County College, New Jersey), Eastern Business Teachers Association Journal, 8:17-18, Fall, 1969.

Roley, D.E. "Innovate or Revitalize? Curriculum Considerations in Post-Secondary Business and Office Education," American Vocational Journal, 44:72-73, March, 1969.

Royer, John Everett. "The Impact of Junior Colleges on the Accounting Profession," Collegiate News and Views, 23:4: 1-4, May, 1970.

Schmidt, Leo A. "A Secondary Use for the Uniform Achievement Test," The Accounting Review, 24:1:188-89, January, 1949.

Schultz, Raymond E. "Curriculum Trends and Directions in American Junior Colleges," Peabody Journal of Education, 48:262-269, July, 1971.

Simon, Sidney J. "Trends in Bookkeeping and Accounting Instruction in Junior Colleges and Two-Year Community Colleges," Eastern Business Teachers Association Yearbook, 40:287-303, 1967.

Spencer, Tom. "Is Our Integrity Above Reproach?" Junior College Journal, June - July, 1971.

Stonerock, B.F. "Accounting - The Field and Its Services," Eastern Business Teachers Association Yearbook, 42:277, 1969.

"Students Talk About Intern Experience," Journal of College Placement, 30:79, April - May, 1970.

Tyra, Anita I. "Accounting Education at the Community College," Journal of Contemporary Business, 1:27-38, Winter, 1972.

Underwood, Klota O. "A Follow-Up Study of Accounting Graduates From Chico State College, 1953-62," National Business Education Quarterly, 33:63, 1964-65.

Urich, Ted and Joe Marick. "Best Place for Vocational Education: The Two-Year College," National Education Association Journal, 54:51-52, December, 1965.

Venn, Grant. "Recommendations for Post-Secondary Vocational and Technical Education," Educational Digest, 30:8-11, November, 1964.

Wagner, G.E. "Vocational Business Education Belongs at the Post-Secondary Level," Business Education Forum, 23:11-12, May, 1969.

Wattenbarger, James L. "The Future of the Community College," Peabody Journal of Education, 48:307-313, July, 1971.

White, R.E. "Junior Colleges, A Technical Education Role," Minnesota Journal of Education, 45:12-14, February, 1965.

Winandy, Donald H. and Robert A. McGrath. "A Study of Admission Policies and Practices for Transfer Students in Illinois," College and University, 45:2:181-191, Winter, 1970.

Zimmer, Robert S. "Opportunity for Learning," Junior College Journal, April, 1970.

## Books

Blocker, Clyde E.; Robert H. Plummer and Richard C. Richardson, Jr. The Two-Year College: A Social Synthesis. Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1965.

Cross, K. Patricia. The Junior College Student: A Research Description. Princeton, New Jersey, Educational Testing Service, 1968.

Gleazer, Edmund J., Jr. This Is the Community College. Boston, Houghton-Mifflin Company, 1968.

Kelley, Win and Wilbur, Leslie. Teaching in the Community Junior College. New York, Meredith, 1970.

Martorana, S.V. Junior College: 20 States. "Progress and Plans In The Empire State," Washington, American Association of Junior Colleges, 1966.

Medsker, Leland L. The Junior College: Progress and Prospect. New York, McGraw-Hill Book Company, 1960.

Plevyak, Paul P. "Preparing Courses of Study," Administration and Supervision of Business Education. Somerville, Somerset Press, 1966.

Thornton, James W., Jr. The Community Junior College. Second Edition. New York, John Wiley and Sons, Inc., 1960.

Walker, John E. Academic Performance of Native and Transfer Students in the Upper Division of the University of Florida, 1966-68, Gainesville, Office of Academic Affairs, University of Florida, 1969.

## Documents

Colorado, State of. Colorado Master Plan for Community College and Occupational Education. Denver, State Board for Community College and Occupational Education, 1968,

Michigan Department of Education. The Metropolitan Community College in Michigan. Lansing, Michigan, Michigan Department of Education, 1968.

New York, State of. Meeting the Increasing Demand for Higher Education in New York State. Albany, Committee on Higher Education, Board of Regents, November, 1960.

New York, State of. "New York State Board of Regents Policy Statement on the Comprehensive Community College," included in the Tentative Statewide Plan for the Expansion and Development of Higher Education. Albany, University of the State of New York, January, 1965.

Ohio, State of. Technical Education in Ohio's State - Assisted Institutions of Higher Education. Columbus, Board of Regents, 1948.

U.S. Department of Health, Education and Welfare. Education for A Changing World. Washington, Office of Education, 1963.

U.S. Department of Labor. Dictionary of Occupational Titles, Vol. II. Washington, United States Government Printing Office, 1965.

U.S. Department of Labor, Bureau of Labor Statistics. Occupational Manpower and Training Needs. Washington, United States Government Printing Office, 1971.

Unpublished Material

Arney, L.H.A. "A Comparison of Patterns of Financial Support with Selected Criteria in Community Junior Colleges." Unpublished Doctor's Dissertation, University of Florida, 1969.

Bessire, Jack DeWitt. "The Development of Occupational Education in a Junior College With Reference to Certain Community Needs and Student Interests." Unpublished Doctor's Dissertation, Michigan State University, 1965.

Boyle, Frederick H. "A Study of Procedures Utilized in Planning Occupational Education Programs in Selected Florida Junior Colleges." Unpublished Doctor's Dissertation, University of Florida, 1965.

Brigham, James Gailey. "Bookkeeping Activities of the Business Office." Unpublished Ed.D. Dissertation, Pennsylvania State College, University Park, 1944.

Cheatham, Orie A. "The Junior College Movement With Emphasis On A Follow-Up Study of Terminal Students Graduated From Selected Missouri Junior Colleges To Determine the Relationship Between Their College Training Programs and Their Present Occupations." Unpublished Doctor's Dissertation, State University of Iowa, 1967.

Dunlap, Harry. "A Study of Student Personnel Records and Other Selected Factors at Milwaukee Technical College as They Relate to Prediction of Achievement in Elementary Accounting." University of Wisconsin, M.S. Thesis, 1969.

Devine, John William. "A Comprehensive Analysis, Classification, and Synthesis of Research Findings and Thought on the Teaching of Bookkeeping and Accounting 1950-1960." Unpublished Ph.D. Dissertation, Indiana University, Bloomington, 1962. Vol. II.

Donohue, Alan Gordon. "The Academic Accomplishments at Northern Illinois University of Accounting Transfer Students Relative to Accounting Non-Transfers." Unpublished M.S. thesis, Northern Illinois University, 1967.

Ernst, Wilma. "An Analysis of Accounting Systems and Practices With Implications for Improvement of Instruction in Accounting." Unpublished Doctor's Dissertation, University of Oklahoma, 1959.

Griffitts, Horace F. "A Study Defining Eight Objectives of Business Programs in Public Community Colleges and Determining the Importance of These Objectives." Unpublished Doctor's Dissertation, Michigan State University, 1967.

Himstreet, William C. "A Study of Business Education in the Public Junior Colleges of California." Unpublished Doctor's Dissertation, University of Southern California, 1955.

Horton, Henry A. "An Evaluation of the Effectiveness of Junior College Terminal Curricula." Unpublished Doctor's Dissertation, The University of Texas, 1962.

Kelly, Richard L. "An Analysis of the Tasks of Selected Semiprofessional Accountants in New York State." Unpublished Doctor's Dissertation, The Pennsylvania State University, 1970.

Ketelhohn, Kenneth D. "A Follow-Up Study of the 1967 and 1968 Accounting Graduates of the Milwaukee Technical College to Determine the Effectiveness of the Two-Year Accounting Curriculum." Unpublished M.S. thesis, University of Wisconsin, 1969.

Krull, Jr., George W. "A Study of Two-Year College Transfer Students' Elementary Accounting Achievement." Unpublished Doctor's Dissertation, Michigan State University, 1971.

Kushner, John. "A Study of the Positions, Subjects Needed, and Level of Work of the Technology Graduates of Broome Technical Community College." Unpublished Doctor's Dissertation, Cornell University, 1965.

Lambe, Cameron W. "Academic Success and Adjustment to University Life of Community College Students Transferring to Western Michigan University." Unpublished Ed.D. Dissertation, Wayne State University, 1964.

Mann, Mitchel. "The Academic Achievement of Transfer Students at the University of Oklahoma." Unpublished Ed.D. Dissertation, University of Oklahoma, 1963.

Marshall, Betty Jean. "Analysis of Accounting Curricula in the Bay Area Junior Colleges." Unpublished Master's thesis, San Francisco State College, 1968.

Matteson, Richard V. "The Relationship of Junior College Programs to the Employment Experiences of Graduates." Unpublished Doctor's Dissertation, University of California (Berkeley), 1966.

Ozzello, Lawrence M. "An Analysis of Accounting - Type Activities Performed by Technical Accountants in Firms Manufacturing Durable Goods With Implications for Evaluation of Post-High School Terminal Accounting Programs." Unpublished Doctor's Dissertation, Michigan State University, 1967.

Patterson, Donzaleigh T. "Articulation of Admissions and Curricular Practices in Junior and Senior Colleges." Unpublished Ed.D. Dissertation, Indiana University, 1971.

Place, Robert I. "The Academic Success of Junior College Transfer Students in the California State College Business Division." Unpublished Doctor's Dissertation, University of Southern California (Los Angeles), 1961.

Rosendahl, Dale. "An Analysis of the Business Curriculum in the Public Junior Colleges of Illinois." Unpublished Master's thesis, Northern Illinois University (DeKalb), 1964.

Shook, James L. "A Study to Determine the Qualifications, Duties, and Practices of Bookkeepers in Selected Kewanee Manufacturing Firms." Unpublished Master's thesis, Northern Illinois University (DeKalb), 1967.

Smith, Mary Lou. "A Review of Literature of Business Education Programs as They Exist in Public Junior Colleges of the United States With Appropriate Conclusions and Recommendations." Unpublished Master's thesis, The University of Wisconsin, 1959.

Tjornhom, Susanne A. "Business Curriculum Patterns in Selected Public Junior Colleges in the United States." Unpublished Doctor's Dissertation, The University of North Dakota, 1967.

Walcher, Olin Dean. "The Accounting Concepts Being Taught in the Accounting Principles Courses in the Junior Colleges of the Southern Great Plains States." Unpublished Ed.D. Dissertation, Oklahoma State University, 1970.

Yandoh, Keith T. "The Upstate New York Community College Accounting Graduate." Unpublished Doctor's Dissertation, State University of New York at Albany, 1971.

## Miscellaneous

American Association of Collegiate Schools of Business. "Interface with Junior and Community Colleges," Proceedings of the Annual Meeting - American Association of Collegiate Schools of Business, May, 1971.

American Association of Collegiate Schools of Business. Accreditation Standards: Interpretation of Standards. St. Louis, American Association of Collegiate Schools of Business, 1969.

American Association of Junior Colleges. Emphasis: Occupational Education in the Two-Year College. Addresses and recommendations at St. Louis Conference, 1966.

Applachian State University. Improving Instruction in the Two-Year College: Proceedings of a Conference for Two-Year College Teams. Applachian State University, Boone, North Carolina, December, 1969.

Arnold, Joseph P. A Study of Recommendations for Technical Education. Project Report, Lafayette, Purdue University, 1965

Astin, Alexander W. College Dropouts: A National Profile. Washington, American Council on Education, 1972.

Barlow, Melvin L. A Survey of Junior College Work Experience Education Programs. Los Angeles, University of California, Division of Vocational Education, 1963.

Brick, Michael. Forum and Focus for the Junior College Movement. New York, Bureau of Publications, Columbia University, 1964.

Carnegie Commission on Higher Education. Policies for the Community College. Report by the Carnegie Commission on Higher Education, New York, McGraw-Hill, 1970.

Citizens' Advisory Committee , Eastern Iowa Community College, Bettendorf. Eastern Iowa Community College Occupational Survey. January, 1968.

Cone, Bonnie E. and Philip D. Vairo. Occupational Education: A Challenge to the Two-Year College. Raleigh, North Carolina State Board of Education, Department of Community Colleges, September, 1967.

Community (Junior) Colleges. "In Business Education: An Evaluative Inventory," Business Education Yearbook, No. 6, 1967, Washington, National Business Education Association, 1968.

Davison, Mildred. A Profile of Job Experiences and Further Study of Students With AAS Degrees. New York, Office of Community College Affairs, City University of New York, 1968.

Hampton, J.E. "New Concepts in Collegiate Education for Accounting Majors," in Clark and Opulent's Professional Education for Business, St. John's University Press, Jamaica, New York, 1964.

Harper, William A., ed. 1971 Junior College Directory. Washington, American Association of Junior Colleges, 1968.

Johnson, B. Lamar. The Improvement of Junior College Instruction. California University, Los Angeles, Junior College Leadership Program, March, 1970.

Johnson, B. Lamar. Islands of Innovation ( Junior College Leadership Program, Occasional Report No. 6). Los Angeles, University of California, 1964.

Knoell, Doroty M. and Leland L. Medsker. From Junior to Senior College: A National Study of the Transfer Student. Washington, American Council on Education, 1965.

Knoell, Dorothy M. and Leland L. Medsker. Articulation Between Two-and Four-Year Colleges. Cooperative Research Project No. 2167. Berkeley, California, Center for the Study of Higher Education, University of California, 1964.

Knoell, Dorothy M. and Leland L. Medsker. Factors Affecting Performance of Transfer Students From Two- and Four-Year Colleges: With Implications for Coordination and Articulation. Cooperative Research Project No. 1133, Berkeley, California, Center for the Study of Higher Education. University of California, 1964.

Moore, Mary Furlong. Moore's Guide to Junior Colleges. New York, New York, Bantam Books, Inc., 1966.

Mueller, Gerhard G., ed. A New Introduction to Accounting. A Report of the Study Group Sponsored by the Price Waterhouse Foundation. Seattle, Washington, Price Waterhouse Foundation, 1971.

O'Connor, Thomas J. Follow-Up Studies in Junior Colleges: A Tool for Institutional Improvement. Washington, American Association of Junior Colleges, 1965.

Pachucki, Chester. Survey of Career Programs in Illinois Public Junior Colleges. Springfield, Illinois Junior College Board, January ,1969.

Perritt, Roscoe D. Analysis of National Survey on Elementary Accounting. (Unpublished study) DeKalb, Illinois, March 15, 1971.

Place, Irene. "Community (Junior) College," National Business Education Association Yearbook, No. 4, 1966, pp. 151-163.

Sharp, Laure M. and Rebecca Krasnegor. The Use of Follow-Up Studies in the Evaluation of Vocational Education. Washington, Bureau of Social Science Research, 1966.

Southern Regional Education Board. Technical - Vocational Education and the Community College. Atlanta, Georgia, the Board, 1964.

Stivers, Earl R. A Study of the 1968 Graduates of Manatee Junior College. Bradenton, Florida, Manatee Junior College, January, 1969.

Storer, Marjorie. A Profile of Chicago City College 1965 Graduates, Follow-Up No. 2. Chicago, Chicago City College, March, 1967.

Suffolk County Community College. Follow-Up Study of Career-Oriented Curriculums: 1968 - Phase I, Job Entry or Transfer. Seldon, New York, 1968.

Thompson, Robert J. "Desired Outcomes of Education for Business in the Junior College." National Business Education Yearbook, 1963.

Venn, Grant. Man, Education and Work. Washington, American Council on Education, 1964.

Wiegman, Robert R. General Education in Occupational Education Programs Offered by Junior Colleges. Washington, American Association of Junior Colleges, 1969.

Williams, Doyle Z. A Statistical Survey of Accounting Education, 1967-1968. New York, American Institute of Certified Public Accountants, 1969.

Yensco, William R. Technical Education in Michigan Community Colleges. Ann Arbor, The University of Michigan, March, 1965.